



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,667	01/05/2001	Yoshiaki Kumamoto	199314US3PCT	5630

22850 7590 02/06/2003

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

BRUENJES, CHRISTOPHER P

ART UNIT	PAPER NUMBER
1772	17

DATE MAILED: 02/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/673,667	KUMAMOTO ET AL.
	Examiner	Art Unit
	Christopher P Bruenjes	1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 20 December 2002.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-32 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-32 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 20 December 2002 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.

6) Other: _____.

DETAILED ACTION

WITHDRAWN REJECTIONS

1. The corrected or substitute drawings were received on December 20, 2002. These drawings are accepted.
2. The 35 U.S.C. 112 rejections of claims 9, 11-14 of record in Paper #12, Pages 2-3, Paragraph 2 have been withdrawn due to Applicant's amendment in Paper #15.
3. The 35 U.S.C. 102 rejection of claims 1-3 and 13 of record in Paper #12, Pages 3-4, Paragraph 3 has been withdrawn due to Applicant's amendment in Paper #15.
4. The 35 U.S.C. 103 rejection of claim 4 of record in Paper #12, Pages 5-6, Paragraph 4 has been withdrawn due to Applicant's amendment in Paper #15.
5. The 35 U.S.C. 103 rejection of claim 5 of record in Paper #12, Pages 6-7, Paragraph 5 has been withdrawn due to Applicant's amendment in Paper #15.

6. The 35 U.S.C. 103 rejection of claims 6-8 of record in Paper #12, Pages 7-8, Paragraph 6 has been withdrawn due to Applicant's amendment in Paper #15.

7. The 35 U.S.C. 103 rejection of claims 9 and 14 of record in Paper #12, Pages 8-10, Paragraph 7 has been withdrawn due to Applicant's amendment in Paper #15.

8. The 35 U.S.C. 103 rejection of claim 10 of record in Paper #12, Pages 10-11, Paragraph 8 has been withdrawn due to Applicant's amendment in Paper #15.

9. The 35 U.S.C. 103 rejection of claim 11 of record in Paper #12, Pages 11-12, Paragraph 9 has been withdrawn due to Applicant's amendment in Paper #15.

10. The 35 U.S.C. 103 rejection of claim 12 of record in Paper #12, Pages 12-14, Paragraph 10 has been withdrawn due to Applicant's amendment in Paper #15.

NEW REJECTIONS

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claim 1-3, 13, 17-19 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks (USPN 2,961,043).

Hicks teaches a molded article (Fig.4) comprising pulp having an opening portion, a body portion, and a bottom portion, wherein said body portion has no seams (col.1, 1.53-58) and said body portion has a least one cross-sectional diameter greater than the opening portion and of another corresponding diameter of said body portion (Fig.4). Hicks also teaches a molded

Art Unit: 1772

article wherein all the cross-sectional diameters of said body portion are greater than corresponding cross-sectional diameters of said opening portion (Fig.4). All of the cross-sectional diameters fall along the same vertical plane. Hicks also teaches a molded article that has no seams over the portion from said body portion to said bottom portion (col.1, 1.53-58). Hicks also teaches that the molded article is obtainable by heat drying in which the wet pulp deposited body is pressed against the inner wall of a mold and dried before transferring from the mold (col.2, 1.28-34). The molded article is formed by inflating a pressing member by feeding a pressurizing fluid into said pressing member (col.2, 1.16-28). Note that applicant in claims 13 and 32 claim a limitation of heat drying the molded article and steps for performing that process which is a process limitation introduced into a product claim, hence, such are given little patentable weight. Also the limitation in claim 17 of how the molded article is formed and how much pressure is applied to the pressing member is also a process limitation, which receives little patentable weight. Hicks fails to explicitly teach a roughness value for the inside and outside surface of the molded article. Hicks also teaches that it is desirable that a container made of pulp is smooth to provide an acceptable appearance and to avoid possible contamination of the)

Art Unit: 1772

contained substance. Also, a smoothly finished surface may be more easily coated with a protective covering or film (col.1, 1.35-39). If the interior surface is desired to be smooth the outside surface can also be smooth. One of ordinary skill in the art would have recognized that a smooth mold, as used for the interior surface, is used for the outside surface as well to create a bottle having smooth surfaces on the inside and outside, in order to provide an acceptable appearance, avoid contamination, and provide a surface in which a protective coating is more easily applied, as taught by Hicks.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the Applicant's invention was made to make a bottle with an inner and outer surface that are smooth with a roughness of less than or equal to 50 micrometers, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art, in the absence of showing unexpected result. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

12. Claims 1-3, 9, 13-19, 25-28 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks (USPN 2,961,043) in view of Stevens (USPN 2,590,221).

Hicks teaches a molded article (Fig.4) comprising pulp having an opening portion, a body portion, and a bottom portion, wherein said body portion has no seams (col.1, l.53-58) and said body portion has a least one cross-sectional diameter greater than the opening portion and of another corresponding diameter of said body portion (Fig.4). Hicks also teaches a molded article wherein all the cross-sectional diameters of said body portion are greater than corresponding cross-sectional diameters of said opening portion (Fig.4). All of the cross-sectional diameters fall along the same vertical plane. Hicks also teaches a molded article that has no seams over the portion from said body portion to said bottom portion (col.1, l.53-58). Hicks also teaches that the molded article is obtainable by heat drying in which the wet pulp deposited body is pressed against the inner wall of a mold and dried before transferring from the mold (col.2, l.28-34). The molded article is formed by inflating a pressing member by feeding a pressurizing fluid into said pressing member (col.2, l.16-28). Note that applicant in claims 13 and 32 claim a limitation of heat drying the molded article and steps for performing that process which is a process limitation introduced into a product claim, hence, such are given little patentable weight. Also the limitation in claim 17 of how the molded article is formed and how much pressure is

Art Unit: 1772

applied to the pressing member is also a process limitation, which receives little patentable weight. Hicks also teaches that it is desirable that a container made of pulp is smooth to provide an acceptable appearance and to avoid possible contamination of the contained substance. Also, a smoothly finished surface may be more easily coated with a protective covering or film (col.1, l.35-39). Hicks fails to explicitly teach a roughness value for the inside and outside surface of the molded article or a plastic layer on the outer or inner surfaces of the pulp-molded article. However, Stevens teaches a molded pulp article that is molded and dried in its ultimate shape without creases, folds or score lines of any kind in its surface, produced by suction molding or vacuum forming from wood pulp (col.1-2, lines 49-10). Over the interior or exterior or both of the molded pulp article a thin plastic film is laminated (col.2, lines 13-17). Stevens also teaches that the fibrous surface is heated to a temperature causing the plastic to be flowable or tacky, therefore making it a resin, in order to apply it to the molded article (col.2, lines 17-30). The plastic added by Stevens to the molded article is any of a number of resin solutions or emulsions (col.4 lines 6-30). The molded article has an interior liner or exterior covering, or both added, in order to render the wall of the article

Art Unit: 1772

impervious to vapors and liquids (col.1, lines 1-5). A heated die is pressed against the pulp layer to produce a smooth even surface in order to contact the thin sheet of plastic material that also has a smooth even surface (col.4, ll.47-54). The plastic sheet is formed by suction or vacuum forming in a die with smooth surfaces (col.5, ll.21-25), and only the surface contacting the pulp layer is heated to flow into the interstices of the contacting fibrous surface (col.2, ll.20-30). Therefore, the article after applying the plastic layer is obviously smooth with a roughness below 50 micrometers. Note that applicant in claims 9 and 14 claims the limitations of laminating and applying a plastic film or resin solution which are process limitations introduced into product claims, hence, such are given little patentable weight. Therefore, one of ordinary skill in the art would have recognized that an interior or exterior covering of plastic film or resin solution is laminated or applied to a molded pulp article in order to make the article impervious to vapors and liquids as taught by Stevens.

Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to laminate a plastic film or apply a resin solution to the molded pulp article of Hicks in order to make the article impervious to vapors and liquids as taught by Stevens and by adding the resin

solution to the inner and outer surface of the pulp layer, the inner surface and outer surface of the article comprising a pulp layer would obviously have a roughness of less than 50 micrometers. Also it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art, in the absence of showing unexpected result. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

13. Claim 4 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks (USPN 2,961,043), alone or in combination with Stevens (USPN 2,590,221), in view of Kelley et al (USPN 5,356,518).

Hicks alone or combined with Stevens teach the molded article claimed in claims 1 and 17 and Hicks teaches that the molded article has a lip on said opening portion for connection of a cap to the molded article, but Hicks fails to teach a screw thread on said opening portion. However, Kelley et al teach a paper container (Fig.6) of sufficient strength and detailing that a thread is provided on an opening portion that is distinct and strong enough for a threaded cap to be removably secured thereto (col.5, lines 57-61). Therefore, one of ordinary skill in the art would have recognized that a screw thread is molded to the opening portion of a paper container in order to provide

Art Unit: 1772

a connection for a threaded cap to be removably secured thereto, as taught by Kelley et al.

Thus, it would have been obvious to one of ordinary skill at the time the applicant's invention was made to mold a screw thread on the opening portion of Hicks alone or combined with Stevens, in order for a threaded cap to be removably secured thereto, as taught by Kelley et al.

14. Claim 5 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks (USPN 2,961,043), alone or in combination with Stevens (USPN 2,590,221) in view of Utsul et al (EP 562,590 A1).

Hicks alone or combined with Stevens teach all that is claimed in claims 1 and 17, but fails to teach a specific article density. However, Utsul et al teach a molded pulp article having a density that is at least 0.3g/cm^3 , which is very high compared with the conventional molded pulp containers, and hence is excellent in mechanical strength such as bending strength and stiffness (col.2, lines 37-42). Therefore, one of ordinary skill in the art would have recognized that a molded pulp article has a density greater than 0.3g/cm^3 in order for the container to have excellent mechanical strength, as taught by Utsul et al.

Art Unit: 1772

Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to mold the pulp article of Hicks alone or combined with Stevens, to have a density greater than 0.3g/cm³ in order to for the container to have high mechanical strength such as bending strength and stiffness, as taught by Utsul et al.

15. Claims 6-8 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks (USPN 2,961,043), alone or in combination with Stevens (USPN 2,590,221) in view of Kakemura et al (USPN 5,968,616).

Hicks alone or combined with Stevens teach all that is claimed in claims 1 and 17 and that bottles and cups are produced as molded paper articles (p.7, lines 29-32), but fails to teach a moisture permeability value or that an article has a corner or an opening portion whose thickness is greater than other portions of said article. However, Kakemura et al teach that a molded article comprising pulp (see abstract) with an inner volume of 1L (col. 11, lines 20-22) which has a moisture permeability of 0.01-0.02 g/pkg/day (equal to 10-20g/m²/day) (col.11, lines 49-58) in order to have a high water vapor barrier property for contents-keeping quality (col.1, lines 30-35). Kakemura et al also teach an article with a corner and an

Art Unit: 1772

opening portion whose thickness is greater than other portion of said article (Fig.7) in order to provide extra strength to the corners and opening portion for the drop test. Therefore, on of ordinary skill in the art would have recognized that a molded pulp article used for containing liquids would have a moisture permeability of less than 100g/m²/day in order to have sufficient contents-keeping quality and to have corners and an opening portion whose thickness is greater than other portions of said article in order to provide extra strength to the corners and opening portion for drop strength, as taught by Kakemura et al.

Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to mold the pulp article of Hicks alone or combined with Stevens to the specifications of moisture permeability of Kakemura et al and mold the corners and the opening portion to have greater thickness than the other portions of the article, in order to have sufficient contents-keeping quality and extra drop strength for the corners and opening portion, as taught by Kakemura et al.

16. Claim 11 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks (USPN 2,961,043), alone or in

Art Unit: 1772

combination with Stevens (USPN 2,590,221) in further view of Brennan (USPN 4,014,737).

Hicks alone or combined with Stevens teach all that is claimed in claims 1 and 17, but fails to teach specific specifications of the pulp fibers used to produce the molded pulp article. However, Brennan teaches a molded pulp article that uses pulp slurry having at least 50% fibers having a length in excess of 1mm, in order to provide molded pulp articles having greater strength, that are easier to dry, and have a greater capability of venting steam from a mold. Furthermore, the exact parameters of fiber distribution of fiber length and the Canadian Standard Freeness claimed by the applicant would have been determined by routine experimentation by one having ordinary skill in the art. Note that limitations on the parameters of the starting materials for an article does not necessarily affect the structure of the article, the starting material limitations receive little patentable weight unless an unexpected result is provided. Therefore, one of ordinary skill in the art would have recognized to select the parameters for the fibers used in the pulp slurry for making the molded pulp article within applicant's claimed range to have provide molded pulp articles having greater strength, that are easier to dry,

Art Unit: 1772

and have a greater capability of venting steam from a mold, as taught by Brennan.

Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have selected the specific parameters of the fibers used in forming the molded pulp article of Hicks alone or combined with Stevens within the applicant's claimed range in order to provide the article with greater strength and make it easier to dry when molding, as taught by Brennan.

17. Claims 10 and 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks (USPN 2,961,043), alone or in combination with Stevens (USPN 2,590,221) in view of Mitchell et al (USPN 6,010,595).

Hicks alone or combined with Stevens teach all that is claimed in claims 1 and 17, but fails to teach a multilayered pulp structure. However, Mitchell et al teach a multiply paper structure for containers for liquids comprising a first pulp layer made from cellulose pulp fiber, a second pulp layer made from a mixture of cellulose pulp fiber and cellulose ester fibers with inherently a mixed layer between the first and second (col.2, lines 48-52). The multiply paper structure is utilized in order to overcome the disadvantages a single

Art Unit: 1772

untreated paper layer has including being permeable to water and other aqueous liquids, and in the thickness desirable, it lacks adequate rigidity (col.1, lines 30-38). Therefore, one of ordinary skill in the art would have recognized that adding multiple layers of different pulps in order to make the molded pulp article impermeable to liquids and provide an adequate rigidity enhances a molded pulp article, as taught by Mitchell et al.

Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to make the molded pulp article of Hicks alone or combined with Stevens from multiple layers of different pulps in order to make the molded pulp article impermeable to liquids and provide an adequate rigidity, as taught by Mitchell et al.

18. Claim 12 and 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks (USPN 2,961,043) in view of Mitchell et al (USPN 6,010,595) in further view of Brennan (USPN 4,014,737). Hicks teaches all that is claimed in claims 1 and 17, but fails to teach a multilayered pulp structure. Mitchell et al teaches a multilayered structure having an innermost and outermost layer (see abstract) wherein the pulp slurry forming the outermost layer contains fibers with Canadian Standard freeness of 362cc

Art Unit: 1772

(col.7, lines 51-57) and the pulp slurry forming the innermost layer contains fibers with Canadian Standard freeness of 226cc (col.7, lines 57-65). Mitchell and Hicks fail to teach fiber length for the pulp slurry forming either layer, however, Brennan teaches that a molded pulp article that uses pulp slurry having at least 50% fibers having a length in excess of 1mm, in order to provide molded pulp articles having greater strength, that are easier to dry, and have a greater capability of venting steam from a mold. Furthermore, the exact parameters of fiber distribution of fiber length claimed by the applicant would have been determined by routine experimentation by one having ordinary skill in the art. Note that limitations on the parameters of starting materials for an article does not necessarily affect the structure of the article, the starting material limitations receive little patentable weight unless an unexpected result is provided. Therefore, one of ordinary skill in the art would have recognized to make a molded pulp article from multiple pulp layers in order to make the article impermeable to liquids and provide adequate rigidity, as taught by Mitchell et al., and to select the parameters for the fibers used in the pulp slurry for making the multiple layered structure of the molded pulp article within applicant's claimed ranges to provide molded pulp articles having greater strength,

Art Unit: 1772

that are easier to dry, and have a greater capability of venting steam from a mold, as taught by Brennan.

Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to make the molded pulp article of Hicks from multiple pulp layers in order to make the article impermeable to liquids and provide adequate rigidity, as taught by Mitchell et al. and to select the specific parameters of the fibers used in forming the multiple layered structure of the molded pulp article within the applicant's claimed ranges in order to provide the article with greater strength and make it easier to dry when molding, as taught by Brennan.

ANSWERS TO APPLICANT'S ARGUMENTS

19. Applicant's arguments filed in Paper #15 regarding the 35 U.S.C. 112 rejection of record have been considered but are moot since the rejections have been withdrawn.

20. Applicant's arguments filed in Paper #15 regarding the 35 U.S.C. 102 rejection of claims 1-3 and 13 as anticipated by Kiyonaga of record have been considered but are moot since the rejections have been withdrawn, but has been fully considered and not found persuasive.

Art Unit: 1772

In response to the applicant's argument that Kiyonaga describes an inner and outer wire net and therefore the final product has a rough surface, first of all the inner and outer wire net are both on the outer surface of the molded article and the inner surface is formed by pressing against a stretchable rigid diaphragm that creates a smooth surface. The outer surface is pressed against a wire net, but depending on the intended outcome of the product the wire net is formed with a coarser or finer mesh size. Also the amount of pressure applied to the pulp layer determines how rough the outer surface is, because with low pressure the netting is not able to bite into the pulp layer to form a roughness. Therefore, as stated in Kiyonaga the mesh size and pressure applied to the pulp layer are determined based on the intended outcome of the product, and finding the correct mesh size or inner pressure for the roughness wanted is found through routine experimentation, in the absence of showing unexpected result. The same argument in regards to the outside surface is also true for Hicks in the new rejection.

Also claim 1 and claim 17, describe the article as having outer and inner surfaces with a center-line average roughness of less than or approximately equal to 50 micrometers, but by using comprising language the roughness limitation refers to the

Art Unit: 1772

innermost or outermost layer, which does not limit it to the pulp layer. Therefore, by adding a plastic layer or coating the roughness of the pulp layer is covered and article is left with a roughness of less than 50 micrometers.

21. Applicant's arguments filed in Paper #15 regarding the 35 U.S.C. rejections of claim 4 over Kiyonaga in view of Kelley et al have been considered but are moot since the rejections have been withdrawn.

22. Applicant's arguments filed in Paper #15 regarding the 35 U.S.C. rejections of claim 5 over Kiyonaga in view of Utsul et al have been considered but are moot since the rejections have been withdrawn.

23. Applicant's arguments filed in Paper #15 regarding the 35 U.S.C. rejections of claims 6-8 over Kiyonaga in view of Kakemura et al have been considered but are moot since the rejections have been withdrawn.

24. Applicant's arguments filed in Paper #15 regarding the 35 U.S.C. rejections of claims 9 and 14 over Kiyonaga in view of

Art Unit: 1772

Stevens have been considered but are moot since the rejections have been withdrawn.

25. Applicant's arguments filed in Paper #15 regarding the 35 U.S.C. rejections of claim 10 over Kiyonaga in view of Mitchell et al have been considered but are moot since the rejections have been withdrawn.

26. Applicant's arguments filed in Paper #15 regarding the 35 U.S.C. rejections of claim 11 over Kiyonaga in view of Brennan have been considered but are moot since the rejections have been withdrawn.

27. Applicant's arguments filed in Paper #15 regarding the 35 U.S.C. rejections of claim 12 over Kiyonaga in view of Mitchell et al in further view of Brennan have been considered but are moot since the rejections have been withdrawn.

Conclusion

28. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is

Art Unit: 1772

reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P Bruenjes whose telephone number is 703-305-3440. The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned

Art Unit: 1772

are 703-872-9310 for regular communications and 703-872-9311 for
After Final communications.

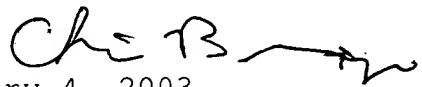
Any inquiry of a general nature or relating to the status
of this application or proceeding should be directed to the
receptionist whose telephone number is 703-308-0661.

Christopher P Bruenjes

Examiner

Art Unit 1772

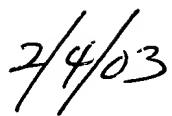
CPB



February 4, 2003



HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772



2/4/03